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EXAMINER

NGUYEN, HUY THANH

ART UNIT

PAPER NUMBER

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/863,044	Applicant(s) ICHIOKA ET AL.	
	Examiner HUY T. NGUYEN	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 19-44, 46-54 and 117 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17, 18-44 and 46-54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 22 March 2007 has been entered.

Claim Rejections - 35 USC § 112

2. Claims 1-17,19-44 and 46-54 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification page 27 does not describe the recitation "to give a viewer an impression that virtual channels are indistinguishable from non-virtual channels." It is noted that at page 27, the specification describes switching between the real channel and virtual channels. Further, it is noted that "non virtual channel" is not defined in the specification .

The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-17,19-44 and 46-54 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is not clear what is meant by "give a viewer an impression that virtual channels are indistinguishable from non-virtual channels". Is the non virtual channel and the virtual channel are the same channel, same content and being displayed at the same time ?. Further it is noted that the recitation does not positively point out the invention since it is a impression of a viewer..

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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5. Claims 1-5,7-17 ,19-22,26-32, 34-44,46-49 and 53-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yagawa in view of Henmi (5,390,027)..

Regarding claim 1, Yagawa discloses a system (Fig. 1) for recording and/or reproducing broadcasting programs received or programmed to be received, comprising:

program sorting means for sorting said broadcasting programs into categories according to a predetermined rule (column 3, lines 20-55;

program recording means for recording said broadcasting programs or programming a recording schedule thereof;

virtual channel management means for assigning virtual channels every category, while setting said broadcasting programs, sorted into said categories, in array on an associated virtual channel in a reproduction start order (Fig. 13-16 column 13, line 25 to column 14, Abstract) ;

user operation means for accepting user-based channel select operation and/or program search operation on said virtual channels; and

program presentation means for taking out a corresponding broadcasting program for reproduction from a selected channel in response to user operations accepted through said user operation means (column 3, lines 20-55, column 9, lines 25-68, column 13, line 25 to column 14, line 14, Abstract, Figs. 13, 16-17).

Yagawa fails to teach wherein time base for display of each channel as recited in claim 1.

Henmi teaches a recording apparatus for recording programs of channels and means for selecting the recorded channel to be displayed and wherein the time base for each recorded channel advances independently (Fig. 7, column 13, line 25-47) . Henmi teaches that each recorded channel can be selected for displaying and the selected channel is displayed on a monitor until the apparatus switch to other recorded channel in response to the user input .

It would have been obvious to one of ordinary skill in the art to modify Yagawa with Henmi by providing a selecting means as taught by Henmi with the apparatus of Yagawa for selecting the time base recoded virtual channel to the apparatus of Yagawa for displaying each virtual channel with a time base advancing as an alternative method for displaying the recorded virtual channel for viewing .

Yagawa as modified with Henmi further teaches give a viewer an impression that virtual channels are indistinguishable from non-virtual channels when a non virtual channel and virtual channel is the same channel and the same content .

Regarding claim 2, Yagawa discloses the system for recording and/or reproducing broadcasting programs according to claim 1, wherein an entry of the categories of said virtual channels is made according to user profiles and/or user instructions (Fig. 13, column 9, lines 25-68).

Regarding claim 3, Yagawa discloses the system for recording and/or reproducing broadcasting programs according to claim 1, wherein said virtual channels include a virtual channel for array of

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programs, which are not included in any category for the failure to set an associated category by the user (Fig. 13, column 9, lines 25-68)..

Regarding claim 4 Yagawa discloses the system for recording and/or reproducing broadcasting programs according to claim 1, wherein said program sorting means is to sort said broadcasting programs into categories according to EPG (Electronic Programming Guide) and/or user instructions) (Fig. 13, column 9, lines 25-68) column 10, lines 4-25).

Regarding claim 5, Yagawa further teaches the system for recording and/or reproducing broadcasting programs according to claim 1, wherein the reproduction start order of the programs on the virtual channels is in conformity with a priority established in accordance with at least one of an on-the-air program order, user profiles and user

Regarding claim 7, Yagawa further teaches the system for recording and/or reproducing broadcasting programs according to claim 1, wherein said user operation means is to accept program search operations including pause, fast forward and rewind of reproduction positions on the virtual channels (Fig. 15).

Regarding claim 8, Yagawa further teaches the system for recording and/or reproducing broadcasting programs according to claim 1, wherein said user operation means is to accept operations of specifying a broadcasting program preservative status, inclusively of deletion, preservation and reservation (for later watching) relating to specific programs on the virtual channels (column 8, lines 2-30, column 11, lines 40-65).

Regarding claim 9, Yagawa further teaches 9. A system for recording and/or reproducing broadcasting programs according to claim 1, wherein said virtual channel management means is to manage the preservative status of the programs set in array on the virtual channels as well (column 13, lines 55-68).

Regarding claim 10, Yagawa further teaches the system for recording and/or reproducing broadcasting programs according to claim 1, wherein said virtual channel management means is to identify each program set in array on the virtual channels as one watched by the user or not (column 13, lines 50-65, column 14, lines 25-38.)

Regarding claim 11, Yagawa further teaches a system for recording and/or reproducing broadcasting programs according to claim 1, wherein said virtual channel management means is to locate the programs on the virtual channels according to a specified preservative status with respect to each of the recorded programs (column 13, lines 50 to column 14, line 10).

Regarding claim 12, Yagawa further teaches the system for recording and/or reproducing broadcasting programs according to claim 1, wherein said virtual channel management means is to locate a program, identified as one watched, in a period of a near past on a time base on the associated virtual channel (column 14, lines 25-38).

Regarding claim 13, Yagawa further teaches the system for recording and/or reproducing broadcasting programs according to claim 1, wherein said virtual channel management means is to locate a program, identified as one programmed to be

deleted, in a period of a remote past on a time base on the associated virtual channel (column 14, lines 40-68).

Regarding claim 14, Yagawa further teaches the system for recording and/or reproducing broadcasting programs according to claim 1, wherein said 10 virtual channel management means is to locate a program, identified as one preserved, in a period of a slightly remote past on a time base on the associated virtual channel (Fig. 15).

Regarding claim , Yagawa further teaches the system for recording and/or reproducing broadcasting programs according to claim 1, wherein said virtual channel management means is to locate a program, identified as one programmed to be recorded, in a period of a future (provided that a point on and after a broadcasting date is required) on a time base on the associated virtual channel (Fig. 15).

Regarding claim 16, Yagawa further teaches the . A system for recording and/or reproducing broadcasting programs according to claim 1, wherein said 25 virtual channel management means is to locate a program, identified as one remaining recorded without being watched (reproduced) yet, in a period of a future spare time on the associated virtual channel (column 14, lines 30-38).

Regarding claim 17, Yagawa further teaches the system for recording and/or reproducing broadcasting programs according to claim 1, wherein said virtual channel management means is to locate a program, identified as one in process of reservation, in a period of a future spare time on the associated virtual channel preferentially (column 8, lines 20-30).

Regarding claim 19, Yagawa further teaches the system for recording and/or reproducing broadcasting programs according to claim 1, wherein said virtual channel management means is to display scheduling of programs on each virtual channel and a watching status and a preservative status of each program in a form of being identified at a glance (column 13, lines 50-68, column 14, lines 30-38).

Regarding claim 20, Yagawa further teaches the system for recording and/or reproducing broadcasting programs according to claim 1, wherein said virtual channel management means is to locate a series of programs on a same virtual channel continuously (Fig. 13).

Regarding claim 21, Yagawa further teaches 2 the system for recording and/or reproducing broadcasting programs according to claim 1, wherein said virtual channel management means is to shift a reproduction start position on the virtual channel in a process of being selected to a period of a future or a past on a time base in response to fast forward or rewind instructions supplied through said user operation means (Fig. 15, column 13, line 50 to column 14, line 15).

Regarding claim 22, Yagawa further teaches that the system for recording and/or reproducing broadcasting programs according to claim 1, wherein said virtual channel management means permits no fast forward operation for a program corresponding to one earlier than a broadcasting date since the fast forward operation is program is controlled by the user ..

Regarding claim 26, Yagawa teaches the system for recording and/or reproducing broadcasting programs according to claim 1, further comprising "To Watch list" management means for managing reproduction information or the like relating to programs paused on each virtual channel (column 13, lines 55-68).

Regarding claim 27, Yagawa teaches the system for recording and/or reproducing broadcasting programs according to claim 26, wherein said "To Watch list" management means is to display a list of paused programs for accepting the user selection on the list, and also to start reproduction of the corresponding recorded program in response to the user selection (column 13, lines 55-68).

Method claims 28-32, 34-44, 46-49 and 53-54 correspond to apparatus claims 1-5, 7-17, 19-22 and 26-27. Therefore method 28-32, 34-44, 46-49 and 53-54 are rejected by the same reason as applied to apparatus claims 1-5, 7-17, 19-22 and 26-27.

6. Claim 6, 23-25, 35 and 50-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yagawa in view of Henmi et al (5,390,027) as applied to claims 1-5, 7-17, 19-22, 26-32, 34-44, 46-49 and 53-54 above, further in view of Takagi et al (5,999,691).

Regarding claim 23, Yagawa fails to teach wherein said virtual channel management means is to shift a reproduction start position on the virtual channel in a process of being selected to a period of a future or a past on a time base in response to fast forward or rewind instructions supplied through said user operation means, while

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setting a reproduction start position on the virtual channel in a process of being non-selected to follow the lapse of real time.

Takagi teaches apparatus for recording and reproducing a plurality of channels having a control means for controlling and selecting on air channels or recorded channels to be reproduced in a period of time defined by the user (column 13, lines 60 to column 15, line 65).

It would have been obvious to one of ordinary skill in the art to modify Yagawa with Takagi by providing the apparatus of Yagawa with a control means as taught by Takagi for controlling and selecting a plurality of channel to be recorded and reproduced thereby enhancing the capacity of the apparatus of Yagawa in selecting a plurality of the channels to be reproduced.

Regarding claims 6 and 24, Yagawa fails to teach reproducing the recorded program while presenting the on air channel by shifting reproduction position.

Takagi teaches an recording/ reproducing apparatus having means for reproducing the recorded program while presenting an on air broadcast program (column 8, lines 40-53). It would have been obvious to one of ordinary skill in the art to modify Yagawa with Takagi by using a control means as taught by Takagi with the apparatus of Yagawa thereby enhancing the capacity of the Yagawa apparatus to enable the apparatus of Yagawa for displaying the recorded program while being receiving the on air program.

Regarding claim 25, Yagawa as modified with Takagi further teaches the system for recording and/or reproducing broadcasting programs according to claim 24, wherein said user operation means is to accept a channel select operation requiring no distinction between the real channels and the virtual channels since the user can selecting a program being on air, recorded and reproduced.

Method claims 35 and 50-52 correspond to apparatus claims 6, 23-25. Therefore method claims 35 and 50-52 are rejected by the same reason as applied to apparatus claims 6 and 23-25.

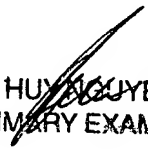
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUY T. NGUYEN whose telephone number is (571) 272-7378. The examiner can normally be reached on 8:30AM -6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

H.N


HUY NGUYEN
PRIMARY EXAMINER